

WAGES AND PRICES IN LATE MEDIEVAL BRAȘOV/BRASSÓ/KRONSTADT¹

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Abstract: In this paper I present the medieval (i. e. until 1526) prices and wages of Brașov, one of the most important medieval Transylvanian towns, on the basis of the town's preserved financial accounts, written in the first decades of the 16th century.

Prețuri și salarii în Brașovul medieval. În studiul de față prezentăm prețurile și salariile din Brașovul medieval (ante 1526), pe baza socotelilor medieval păstrate, care provin din primele decenii ale sec. al 16-lea.

Key words: wages; prices; Middle Ages; Transylvania; Brașov/Brassó/Kronstadt.

Cuvinte cheie: prețuri; salarii; Ev Mediu; Transylvania; Brașov.

Although there is a rich literature on the medieval West European wages and prices, the finances of the Transylvanian towns have not constituted the subject of systematic and thorough research so far: only two lists of medieval wages and prices have been published, which refer to the domains of Hunedoara/Vajdahunyad and Alba Iulia/Gyulafehérvár, respectively.² This does not mean that sources of such studies, namely medieval financial accounts, have not survived from Transylvania. I know these type of documents regarding Sibiu (Nagyszeben, Hermannstadt, from the period between c. 1350-1526),³ Bistrița (Beszterce, Bistritz or Nösen, 1461-1526),⁴ Cluj (Kolozsvár, Klausenburg, 1496),⁵ Sighișoara (Segesvár, Schäßburg, 1522),⁶ and Medias (Medgyes, Mediasch, 1507-1519).⁷

In this paper I analyze the late medieval wages and prices in Brașov (in Latin: *Corona*, in Hungarian: Brassó, in German: Kronstadt), one of the most important Transylvanian towns, namely in the period between 1506 and 1526. The chronological limits of the study are determined by practical and historical considerations: the first town accounts of Brașov remain from 1506 and the year 1526 is considered the end

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² Pataki, Iosif, *Domeniul Hunedoara la începutul secolului al XVI-lea. Studiu și documente*, București, 1973 (Biblioteca istorică XXXIX), XLIII-XLVI, CV-CVI, 296-299; David Prodan: *Iobăgia în Transilvania în secolul al XVI-lea*, 1. köt., București, 1968.

³ *Rechnungen aus dem Archiv der Stadt Hermannstadt und der sächsischen Nation*, vol. 1, *Quellen zur Geschichte Siebenbürgens aus sächsischen Archiven I/1* (Sibiu: In Commission bei Franz Michaelis, 1880) (henceforth: *Rechnungen*); Franz Zimmermann, “Die Wirtschaftsrechnungen der Stadt Hermannstadt in dem Archiv der Stadt Hermannstadt und der sächsischen Nation,” *Archiv des Vereins für siebenbürgische Landeskunde. Neue Folge* 16 (1881): 634, 648, 651; Franz Zimmermann, “Aus alten Einbänden von Rechnungen aus den Jahren 1508 bis 1691,” *Archiv des Vereins für siebenbürgische Landeskunde. Neue Folge* 19 (1884): 86.

⁴ Konrad G. Gündisch, “Cel mai vechi registru de socoteli al orașului Bistrița (1461-1462)” (The Oldest Account of the Town of Bistrița (1461-1462)), *Acta Musei Napocensis* 14 (1977): 337-347; *Die Rechnungsbücher von Bistritz*, vol. I, 1462–1520, 2013, eds. Simon Zsolt – Szabó András Péter, http://www.ungarisches-institut.de/media/bistritz/rechnungsbuecher_bistritz.htm.

⁵ The accounts of the expenses and the income of the town. Károly Szabó, “Kolozsvár város 1496-diki számadása” (The Account of the Town of Cluj from 1496), *Történelmi Tár* (1883): 571-584 (henceforth: Szabó, “Kolozsvár,”).

⁶ Accounts of the expenses and income of the town. Georg Daniel Teutsch, “Die Schäßburger Gemeinderechnung von 1522. Züge aus der sächsischen Leben zur Zeit der Untergangs der ungrischen Reichs,” *Archiv des Vereins für siebenbürgische Landeskunde. Neue Folge* 1 (1853): 135-161; (henceforth: Teutsch, “Die Schäßburger Gemeinderechnung”). Simon Zsolt, “Die Schäßburger Rechnung von 1522,” *Zeitschrift für Siebenbürgische Landeskunde* 35 (2011): 167–185.

⁷ The accounts of the expenses and of the incomes of the town. Joseph Bedeus von Scharberg, “Mittheilungen über ein Medwischer Stadtbuch aus dem 16. und 17. Jahrhundert,” *Archiv des Vereins für siebenbürgische Landeskunde. Neue Folge* 3 (1858): 55-66. The investigation from the point of view of the history of wages and prices of all these enumerated sources is undergoing by the author of this paper. Cf. my article, „Szebeni árak és bérek a középkorban” (Medieval prices and wages of Sibiu/Hermannstadt/Szeben), sent to be published in the collected essays volume of the conference *Cluj-Napoca / Kolozsvár/Klausenburg – 700*, planned to be published in Cluj-Napoca in 2017.

of the medieval Hungarian Kingdom, the date of the defeat of its army at Mohács, after which a civil war started between the parties of the two pretenders to the Hungarian throne, John Szapolyai and Ferdinand of Hapsburg. During this war Braşov was pacified in 1530, but the hostilities ended in Transylvania only in 1536.⁸ This paper is based on all the medieval accounts of the town of Braşov which have been preserved until now. The most important accounts which I analyzed are the accounts of the stewards (*procuratores*, 1520-1526), as the summary accounts of the expenses and incomes of the town (1506-1526) contain only rarely data about prices and wages.⁹

1. Wages of the military employees of the town

Braşov, lying near important mountain passes on the border of the medieval Hungarian Kingdom, was one of the first targets of attacks coming from the south and east. The Ottomans' raids, which reached Transylvania several times in the fifteenth century, were especially dangerous; they attacked and burnt Braşov or the district several times.¹⁰ In consequence of all this, it was important for Braşov to be prepared to repel occasional military attacks. Besides this, the obligation to send firearms, gunpowder or saltpeter often featured among the military obligations of medieval Hungarian towns.¹¹ Therefore it was also important in this regard for the town to possess firearms and ammunition and to hire persons who were able to produce ammunition and handle and repair firearms.¹²

At the arsenal it was necessary to hire specialized personnel. In Braşov this group was formed by two to four men: one to three gun masters, (*pixidarius*, *bombardista*), an archery master (*balistarius*), and a copper-founding master (*cantrifusor*) (see Table 1).¹³ The gun masters, often hired by Hungarian towns,¹⁴ had to found cannons and cannon balls, make balls and gunpowder, move and keep the weapons in repair, hold shooting exercises, handle the weapons and lead the defense in case of war.¹⁵ In the fifteenth-century contracts for gun-masters of north Hungarian towns it was specified how many weapons and how much ammunition they had to produce. The work performed above the obligations fixed in the contract was paid separately.¹⁶ This was probably the case in Braşov, too, and this is the reason why the town also paid for producing weapons and ammunition, and repair, besides the gun-masters' wage.

Among these people only the archery-master was hired continuously; the number of gun-masters varied between one and three, and the copper-founding master was hired only for two years to work at

⁸ For the civil war in Transylvania, see: Roderich Gooss, *Die Siebenbürger Sachsen in der Planung deutscher Südostpolitik* (Vienna: Adolf Luser, 1940), 94-428.

⁹ *Rechnungen aus dem Archiv der Stadt Kronstadt*, vols. 1-3, Quellen zur Geschichte der Stadt Kronstadt in Siebenbürgen, 1-3 (Braşov: Albrecht and Zillich, 1888-1892) (henceforth: *Quellen*). For the description of the tax accounts, see: István Fráter, *Brassó gazdasági helyzete a 15-16. század fordulóján* (The Economic Situation of Braşov at the Turn of Fifteenth Century), (Budapest: Fráter és Társa, 1930): 3-16 (henceforth: Fráter, *Brassó gazdasági helyzete*).

¹⁰ For the Ottomans' attacks in Transylvania, see: Gustav Gündisch, "Incursiunea turcească în anul 1493 în ținutul Sibiului" (The Turkish Incursion in the Region of Sibiu in 1493), *Studii* 14 (1961): 1491-1502; idem, "Siebenbürgen in Türkenabwehr 1395-1526," in idem, *Aus Geschichte und Kultur der Siebenbürger Sachsen. Ausgewählte Aufsätze und Berichte*, Schriften zur Landeskunde Siebenbürgens 14 (Cologne Böhlau, 1987), 37-64.

¹¹ András Kubinyi, "Városaink háborús terhei Mátyás alatt" (Our Towns' War Burdens under Matthias), in *Házi Jenő Emlékkönyv. Emlékkönyv Házi Jenő Sopron város fölevéltárosa születésének 100. évfordulója tiszteletére* (Házi Jenő Memorial Volume. Memorial Volume in Honor of the 100th Anniversary of Jenő Házi's Birth), ed. Péter Dominkovits and Éva Turbully (Sopron: Soproni Levéltár, 1993), 156-157. Béla Iványi, "A tüzérség története Magyarországon a kezdetektől 1711-ig" (The History of Artillery in Hungary from the Beginnings until 1711), *Hadtörténeti Közlemények* 27 (1926): 135-138, 153-156 (henceforth: Iványi, "A tüzérség története"). Braşov, for example, had to send canons and rifles to the voivode in 1443, 100 rifles, five centner gunpowder and 1000 balls in 1471, two cannons with enough stone balls and eight centner gunpowder in 1478. *Ub*, vol. 6, 514, vol. 7, 202.

¹² Sibiu and Bistriţa also had their own arsenals, Elek Benkő, *Erdély középkori harangjai és bronz keresztelõmedencéi* (Medieval Bells and Bronze Baptismal Fonts of Transylvania) (Budapest-Cluj: Teleki László Alapítvány-Polis, 2002), 126, 128, 139 (henceforth: Benkő, *Erdély középkori harangjai*).

¹³ On the archers and the cannon makers of Braşov, see: Ioan Marian Țiplic, *Breslele producătorilor de arme din Sibiu, Braşov şi Cluj: secolele XIV-XVI* (The Guild of the Weapon Producers from Sibiu, Braşov and Cluj: Fifteenth-Sixteenth Centuries), *Biblioteca Septemcastrensis* 1 (Sibiu: Editura Universităţii "Lucian Blaga" din Sibiu, 2001), 60-66, 69-72.

¹⁴ Gun-masters are mentioned in Bratislava, Sopron, Banská Bystrica, Bardejov, Presov, Košice, Sibiu, Bistriţa. Iványi, "A tüzérség története," 141-142. Benkő, *Erdély középkori harangjai*, 126.

¹⁵ Benkő, *Erdély középkori harangjai*, 126, 138. Kubinyi, *Budapest*, 121-122. Iványi, "A tüzérség története," 148-151, 153. Kubinyi, *Budapest*, 121-122.

¹⁶ Iványi, "A tüzérség története," 143-145.

cannon-making. It is possible that their number was increased because of the high repair and ammunition costs of 1522.¹⁷

The gun-masters got salaries between 16 and 28 florins, on average 25.4, 21.5 and 18.67 florins respectively, the archery master between 15 and 22 florins, on average 17.83 florins and a copper-founding master between two and 18 florins, on average nine florins salary. (Concerning the purchasing power of the florin, see the prices and wages of Braşov, listed in Tables 4 and 5; in lack of space, I enumerated data referring only to a single year.) Compared with other Transylvanian salaries, those of the gun-masters and of the archery-master seem to have been close to the average.¹⁸ They usually received their salaries in four installments, a general custom among Hungarian towns,¹⁹ at approximately regular intervals, generally at the end of a three-month period (usually in the second part of March, June, September and December).

Linked to the security of the town, the municipality of Braşov hired three gatekeepers, too.²⁰ Each of them got 46 denars weekly, consequently their yearly salary was of 23.92 florins.

The total of these different kinds of military expenses varied. As to their fluctuation about the same applies as to the costs of the arsenal. These ups and downs were only to be expected because this period was characterized by temporary military activities and because the military costs, following the manner of wars, were changeable and unpredictable.²¹

2. Wages of the employees related to the town's infrastructure

The town employed one person to inspect the riverbank, who appears in the accounts as 'examiner of the riverbank' (*temptans ripam*). (The moat and the creeks which flowed through the town were strengthened and fixed with a wooden structure,²² which needed constant supervision and repair.) This examiner's average yearly wage was 2.3 florins²³ (see Table 2). Besides the examiner, the city paid separately for different jobs done on the riverbanks, mainly repairs made by carpenters, on average c. 3 florins.

3. Wages of the ecclesiastical and educational employees of the town

This expense item contains the salaries of people related to the church, namely the chaplain of the All Saints' chapel, the bell-ringer, the organist, and the teachers of the town. In Braşov, as in the settlements of the Saxon University, the parish priest was elected by the community.²⁴ The schoolmasters of urban parish

¹⁷ When there were two or three gunmasters, they were specialized, so that one master's duty was the maintenance of the cannon balls, the making of gunpowder and the shooting exercises, and the other master's duty the gun repair and the cannon making. Benkő, *Erdély középkori harangjai*, 147. In Sibiu between 1494 and 1509 one gun-master specialized in making gunpowder. Benkő, *Erdély középkori harangjai*, 126

¹⁸ In 1492 in Sibiu the salary of the person who made the cannons was 12 florins, that of the gun master in the 1490s 25 florins, but in the 1510s it was already 50 florins. In Sighişoara the yearly salary of the town archery master was 13.86 florins, Benkő, *Erdély középkori harangjai*, 127. Teutsch, "Die Schäßburger Gemeinderechnung," 156.

¹⁹ Data are from Kremnica, Košice, Bardejov. Kálmán D'Isoz, *Körmöcbánya XV-XVI. századi zenészeiről* (About the Musicians of Kremnica in the Fifteenth-Sixteenth Centuries) (Budapest: Pesti Könyvnyomda-Részvénytársaság, 1908), 4 (henceforth: D'Isoz, *Körmöcbánya*); Benkő, *Erdély középkori harangjai*, 78-79.

²⁰ For the urban employees of Braşov, see: Horváth, *Az erdélyi századok*, 79-80.

²¹ Gerhard Fouquet and Ulf Dirlmeier, "Probleme und Methoden der quantitativen Finanz- und Wirtschaftsgeschichte des Spätmittelalters: Öffentliche Finanzen und städtische Militärpolitik in Basel und Hamburg während der Jahre 1460 bis 1481," in *Geschichtswissenschaft und elektronische Datenverarbeitung*, Beiträge zur Wirtschafts- und Sozialgeschichte, 36, ed. Karl-Heinrich Kaufhold and Jürgen Schneider, 205, 208. (Wiesbaden: Franz Steiner, 1988); Fouquet, "Die Finanzierung von Krieg," 60, 69, 74 with data 60-68, 76-82; Josef Rosen, "Kriegsausgaben im spätmittelalter: Der militärische Aufwand in Basel 1360-1535," *Vierteljahrschrift für Sozial- und Wirtschaftsgeschichte* 71 (1984), 466-487, especially 481.

²² Jekelius, *Das Burzenland*, 221. In medieval Bistriţa the situation was similar. Niedermaier, *Siebenbürgische Städte*, 154. This is based on the fact that wood was transported to the shore and the carpenters worked on the riverbank.

²³ On the basis of the available sources I cannot tell if he had other obligations outside the examination of the stream banks, but it is possible that he also had to work on repairs. This examiner got a salary, and it seems that his salary was somehow fixed, because he received the same sums almost every time, namely 0.5 florins, 0.24 and 0.12 florins, only the frequency of the payments varied.

²⁴ *Ub*, vol. 1, 34. For district of Braşov, see: *Ub*, vol. 4, No. 366 (1428). For all of Hungary, see: András Kubinyi, "Plébánosválasztás és egyházközségi önkormányzat a középkori Magyarországon" (Parson Election and Parish Autogovernment in Medieval Hungary), in idem, *Főpapok, egyházi intézmények és vallásosság a középkori Magyarországon* (Prelates, Ecclesiastical Institutions and Religiosity in Medieval Hungary), Magyar Egyháztörténeti Enciklopédia Munkaközösség könyvek 22 (Budapest: Magyar Egyháztörténeti Enciklopédia Munkaközösség, 1999), 271-282.

school of Braşov, like in other Hungarian towns, were elected by the towns' government with the agreement of the parish priest.²⁵ The payment of the listed persons by the town is a manifestation of these relationships.

In Hungarian towns children were educated mainly in the parish schools, where the quality of the education generally was high, in the case of Buda it was comparable to that of universities.²⁶ In the Middle Ages three schools operated in Braşov: the school of the parish church (today the Lutheran church, the so-called "Black church"), first mentioned in 1388,²⁷ the school near the Orthodox Church of St. Nicholas in Şchei, first mentioned in 1495, 1512 or 1515,²⁸ and the school of St. Bartholomew's church, first mentioned in 1502.

The municipality of Braşov paid the teachers of the parish church and the school of St. Bartholomew's. The payment of the teacher of the parish school fluctuated in the 1520's: he received a salary of 34 florins in 1521, 60 florins in 1523, and 50 florins in the rest of the period; on average he got 49 florins (see Table 3). The teacher of St. Bartholomew's school had considerably lower wages, only 16 florins.

In Hungarian town schools the schoolmasters received 42 florins yearly in Banská Bystrica (in 1489), 25 florins in Košice (fifteenth century), 20 florins in Kežmarok (1520, 1544) and Sibiu (1496-1526), and six (1454-1467), then 16 florins in Prešov (1520).²⁹ The schoolmaster of Braşov had the highest recorded salary among these Hungarian schoolmasters. It is possible that the higher salary was related to the proportionately more work the schoolmaster had to do (since Braşov was bigger than these other towns there were more children to teach). It is also possible, however, that the relatively high salary was connected to the fact that after 1514 the schoolmasters of Braşov had university studies.³⁰

In the music played in the urban parish churches, besides the choirmaster, the organist played the leading role. In Hungary, after a questionable piece of information for 1275, an organ was first mentioned in 1350 in Sibiu, and organ galleries began to be built in churches from the fourteenth century onwards. In the

²⁵ Remig Békefi, *A népoktatás története Magyarországon 1540-ig* (The History of Popular Education in Hungary) (Budapest: Magyar Tudományos Akadémia, 1906), 29, 231, 399-400 (henceforth: Békefi, *A népoktatás története*); István Mészáros, *Az iskolaügy története Magyarországon 996-1771 között* (The History of Schools in Hungary between 996 and 1771) (Budapest: Akadémiai Kiadó, 1981), 131-135 (henceforth: Mészáros, *Az iskolaügy története*). Among the Saxons, according to the statutes of the Sibiu chapter from 1351 or 1360, the statutes of the Braşov chapter of 1444 and two letters referring to the chapter of Bistriţa from 1438 and 1439, the teachers of the parish church's school and the bell-ringers were hired by the community but they had to have the agreement of the parish priest. Georg Daniel Teutsch, "Über die ältesten Schulanfänge und damit gleichzeitige Bildungszustände in Hermannstadt," *Archiv des Vereins für siebenbürgische Landeskunde, Neue Folge* 10 (1872): 199-200 (henceforth: Teutsch, "Über die ältesten Schulanfänge"), *Ub*, vol. 5, No. 2512, 2307, 2326. Teutsch doubted the truth of the statutes and he thought that they were written at the earliest in the second half of the fifteenth century. Teutsch, "Über die ältesten Schulanfänge," 200.

²⁶ Kubinyi, *Budapest*, 183.

²⁷ Franz Wilhelm Seraphin, "Kronstädter Schulen vor der Reformation," *Archiv des Vereins für siebenbürgische Landeskunde, Neue Folge* 23 (1891): 747-749.

²⁸ Related to the problematic dating of the Romanian school, see: Gernot Nussbächer, "Noi contribuții privind trecutul învățământului românesc de la Braşov" (New Contributions Referring to the Past of the Romanian Education in Braşov) in: idem, *Din cronici și hrisoave. Contribuții la istoria Transilvaniei* (From Chronicles and Charters. Contributions to the History of Transylvania), tr. Elisabet Marin, Gernot Nussbächer, (Bucharest: Editura Kriterion, 1987), 135-136. Nussbächer inferred that the *Jerg grematik* (George, the grammar teacher), mentioned in the tax-registers from 1480 until 1506, was a teacher and therefore the Romanian school existed from 1480 on, *Ibidem*, 134.

²⁹ Békefi, *A népoktatás története*, 31. The data from Sibiu are from the years 1496, 1497, 1507, 1509, 1520-1521, 1524-1526. Friedrich Teutsch, "Geschichte des ev. Gymnasiums A. B. in Hermannstadt," *Archiv des Vereins für siebenbürgische Landeskunde, Neue Folge* 17 (1882): 6-7, 12, note 4, 14, note 2. Heinrich Herbert, "Die Gesundheitspflege in Hermannstadt bis zum Ende des sechzehnten Jahrhunderts," *Archiv des Vereins für siebenbürgische Landeskunde, Neue Folge* 20 (1885): 8, 20, note 13 (henceforth: Herbert, "Die Gesundheitspflege in Hermannstadt"). Some later salaries: 16 florins in Trnava (1541), nine florins in Trenčín (1530, 1540). The schoolmaster and the organist of Bistriţa together received 80 florins (1537), in Kremnica between 1527 and 1533 the schoolmaster got 25 denars weekly, consequently 13 florins yearly, Békefi, *A népoktatás története*, 31.

³⁰ Sándor Tonk, *Erdélyiek egyetemjárása a középkorban* (University Studies of Transylvanians in the Middle Ages) (Bucharest: Kriterion, 1979), 159-161. Schoolmasters with university studies appeared in Transylvania in the 1430's. *Ibidem*. That the financial point of view was important in choosing a medieval work or serving place is indicated in the fifteenth century, when a certain cleric from Vienna was interested in serving as a priest in Buda; he asked what work he would do and what income he would receive, Alfons Huber and András Kubinyi, "Egy budai iskolamester pályája a XV. század második felében" (The Career of a Schoolmaster in Buda in the Second Half of the Fifteenth Century), in *A magyar iskola első évszázadai. Die ersten Jahrhunderte des Schulwesens in Ungarn*, ed. Katalin Szende (Győr: Xántus János Múzeum, 1996), 53.

fifteenth century they also appeared in smaller village churches, and from the fourteenth century organmakers are also mentioned.³¹ The organist was paid by the town in Bardejov (between 1435 and 1439), in Kremnica (from 1493), and probably in Košice (1475) and Trnava (1519).³²

The salary of the organist of Braşov was 40 florins. Taking into account that the organist in Cluj received 19 florins in 1496 and that in Kremnica eight florins in 1493,³³ the organist of Braşov was well paid. Probably in consequence of the high salary Braşov could hire talented organists. In 1499 the humanist Valentin Kraus praised the music of the organist of Braşov, a student of the royal organist, Grimpeck.³⁴

After the use of bell in Hungary became widespread in the twelfth and thirteenth centuries, urban municipalities began to hire bell-ringers, with the consent of the parish priest, from the end of the fourteenth century. According to fourteenth-century chapter statutes, bell-ringers also had to perform certain tasks related to the mass in the church or around it (to clean, to carry books, to light the candles, etc.). Probably the urban bell-ringers had to do similar work, too, but for extraordinary events (e. g. on the occasions of royal visits or fairs) they got extra money from the municipality, as they did from the parishioners for ringing the bells at funerals. Comparing with the salary of the bell-ringer in Bardejov, who received 16 florins in 1426, and that of Sibiu, who got 32 florins in 1506, the salary of 24 florins of the bell-ringer of Braşov was of medium value.³⁵

The accounts of Braşov did not mention at which church the bell-ringer and the organist served, therefore they were probably employed at the only parish church of the town³⁶, but it is possible that when they did not have to serve at the parish church, they served also at the churches under the parish church's jurisdiction.

4. Wages of the medical employees of the town

In a single year, in 1520, the town hired a pharmacist, *Johannes de Monaco*.³⁷ This was an exceptional phenomenon among Hungarian towns, where mainly private pharmacists functioned: town pharmacists are known only from Sibiu (1494) and Bistriţa (1516), but even in Sibiu the pharmacist could not have lived on his practice and in some years the town did not have any pharmacist.³⁸ In German

³¹ Benjamin Rajeczky, ed., *Magyarország zenetörténete*, vol. 1, *Középkor* (The Music History of Hungary, vol. 1, Middle Ages) (Budapest: Akadémiai, 1988), 78-79 (henceforth: Rajeczky, *Magyarország zenetörténete*); Kilián Szigeti, "Orgonálás a középkori Magyarországon Budavár elestéig, 1541-ig" (Organ Music in Hungary until the Fall of Buda Castle in 1541), *Magyar Zene* (1975): 380-388. On medieval Hungarian organs, organ music and organists, see also: Kilián Szigeti, "A középkori orgona. Különös tekintettel a magyarországi emlékekre" (The Medieval Organ. With Special Regard to the Hungarian Records), *Magyar Zene* (1974): 186-201. For music in medieval Hungarian towns, see: András Kubinyi, "Spielleute und Musiker von Buda (Ofen) in der Jagello-Epoche," *Studia Musicologica Academiae Scientiarum Hungaricae* 9 (1967): 79-85, Rajeczky, *Magyarország zenetörténete*, 74-81. Organists also took part in several towns in the teaching of grammar. Mészáros, *Az iskolaügy története*, 136.

³² Rajeczky, *Magyarország zenetörténete*, 78-79; D'Isoz, *Körmöcbánya*, 4; Békefi, *A népoktatás története*, 318, 399. Bistriţa also paid an organist between 1533 and 1540. Békefi, *A népoktatás története*, 444-445.

³³ Szabó, "Kolozsvár," 572; D'Isoz, *Körmöcbánya*, 4. The organist and the schoolmaster of Bistriţa together received 80 florins in 1537. Békefi, *A népoktatás története*, 31.

³⁴ Jenő Ábel, *Magyarországi humanisták és a Dunai Tudós Társaság* (Hungarian Humanists and the Danubian Scholar Society), *Értekezések a Nyelv- és Széptudományok köréből*, 8.8 (Budapest: M. Tud. Akadémia, 1880), 1-8, 122. About Grimpeck, see: Rajeczky, *Magyarország zenetörténete*, 137-138; László Zolnay, "Data of the Musical Life of Buda in the Late Middle Ages," *Studia Musicologica Academiae Scientiarum Hungaricae* 9 (1967): 103. The organist paid by the town was not the only one in Braşov: around 1529 in the Dominican friary there was also an organist and a novice learned to play the organ and in 1520 an organmaker was the member of the joiners' guild. Fabritius, "Zwei Funde," 31-32. Philippi, "Steinmetzen, Maler und Bildschnitzer," 16.

³⁵ Benkő, *Erdély középkori harangjai*, 78-79. For ecclesiastical and lay bell-ringing, see: ibidem, 70-77.

³⁶ Marie-Madelaine de Pourquery, "A plébánia és a városi környezet. Plébániatemplomok a XIV. és XV. századi magyar városokban" (The Parish and the Urban Environment. Parish Churches in Hungarian Towns of the Fourteenth and Fifteenth Centuries), *Aetas* 3-4 (1991): 62-63, 78. Medieval Hungarian towns had few parishes, and most of Transylvanian Saxon towns had only one. Ibidem.

³⁷ *Quellen*, 229, 237, 247, 249, 283, 289. According to his name, he was a foreigner, as were most of the pharmacists of Braşov in the sixteenth and seventeenth centuries. G. Barbu and A. Huttman, "Începuturile farmaciei orăşeneşti a Braşovului" (The Beginnings of the Urban Pharmacy), in *Din istoria medicinei româneşti şi universale* (From the History of Romanian and Universal Medicine History) (Bucharest: Editura Academiei Republicii Populare Române, 1962), ed. Vasile L. Bologa, 87 (henceforth: Barbu and Huttman, "Începuturile farmaciei orăşeneşti").

³⁸ Herbert, "Die Gesundheitspflege in Hermannstadt," 7-8; Kubinyi, "Orvoslás, gyógyszerészek," 256-257; Valeriu L. Bologa, Gheorghe Brătescu, Benone Duţescu and Ştefan M. Milcu, ed., *Istoria medicinei româneşti* (The History of

territories town pharmacies were to be found in several towns as early as the fourteenth century, but mainly from the fifteenth century.³⁹ The pharmacist of Braşov is first mentioned in 1512, when he raised a loan of 200 florins from the town to pay his debts to the pharmacists of Buda.⁴⁰ In 1520 the town paid the pharmacist's salary (18.72 florins) and the rent on his house (six florins),⁴¹ but all the money spent on him came from the villicus, who also paid 100 florins to procure materials from pharmacists of Buda. Consequently the pharmacist was in fact hired by the villicus and the stewards only administered the payment. In the following year it was also the villicus who paid all the expenses related to the pharmacy.⁴²

Romanian Medicine) (Bucharest: Editura Medicală, 1972), 119. Kubinyi, "A magyarországi orvos- és gyógyszerésztársadalom," 75.

³⁹ Rudolf Schmitz, "Stadtarzt-Statdapotheke im Mittelalter," in *Stadt und Gesundheitspflege*, Stadt in der Geschichte, 9, ed. Bernhard Kirchgässer and Jürgen Sydow, (Sigmaringen: Thorbecke, 1982), 20.

⁴⁰ The council of Sibiu also helped install the pharmacy: in 1524 it gave 70 florins, in 1525 lent 250 florins. Herbert, "Die Gesundheitspflege in Hermannstadt," 10, 23, notes 26-27.

⁴¹ In 1528 the house rent of the physician of Sibiu was paid. Herbert, "Die Gesundheitspflege in Hermannstadt," 8.

⁴² Barbu and Huttman, "Începuturile farmaciei orăşeneşti," 77, 79, 81. *Quellen*, 229, 237, 247, 249, 283, 289, 343, 363, 508, 531.

| | Archery master | Gunmaster 1 | Gunmaster 2 | Gunmaster 3 | Copper-founding master | 3 gatekeepers |
|---------|----------------|-------------|-------------|-------------|------------------------|---------------|
| 1521 | 15.00 | 20.00 | | | | 71.76 |
| 1522 | 15.00 | | | 22.00 | | 71.76 |
| 1523 | 20.00 | 16.00 | 23.00 | 25.50 | | 71.76 |
| 1524 | 20.00 | 20.00 | | 28.00 | | 71.76 |
| 1525 | 15.00 | | 24.50 | 24.50 | 16 | 71.76 |
| 1526 | 22.00 | | 17.00 | 27.00 | 2 | 71.76 |
| Total | 107.00 | 56.00 | 64.50 | 127.00 | 18 | 430.56 |
| Average | 17.83 | 9.33 | 10.75 | 21.17 | 3 | 71.76 |

Table 1. Wages of the military employees, 1521-1526

| | |
|---------|-------|
| 1521 | 4.00 |
| 1522 | 1.50 |
| 1523 | 0.50 |
| 1524 | 1.98 |
| 1525 | 3.08 |
| 1526 | 2.76 |
| Total | 13.82 |
| Average | 2.30 |

Table 2. The wages of the “examiner of the riverbank”, 1521-1526

| | Organist | Bellringer | Chaplain | School master of the | |
|---------|----------|------------|----------|-------------------------|---------------|
| | | | | St. Bartholmew's church | parish church |
| 1521 | 40 | 24 | 16 | 16 | 34 |
| 1522 | 40 | 24 | 16 | 16 | 50 |
| 1523 | 40 | 24 | 16 | 16 | 60 |
| 1524 | 40 | 24 | 16 | 16 | 50 |
| 1525 | 40 | 24 | 16 | 16 | 50 |
| 1526 | 40 | 24 | 16 | 16 | 50 |
| Total | 240 | 144 | 96 | 96 | 294 |
| Average | 40 | 24 | 16 | 16 | 49 |

Table 3. Wages of the ecclesiastical and educational employees, 1521-1526

| | Unit | Date of purchase | Quantity | Total price, in akces | Unit-price (in denars) |
|--|------|------------------|----------|-----------------------|------------------------|
| Ax, for cannons (öss [=Achse] <i>ad bombardas</i>) | | 18-Mar | 2 | 8 | 8 |
| Axe (<i>securis</i>) | | 25-Nov | 2 | 8 | 8 |
| Bailer, of leather (<i>urna de coreo facta</i>) | | 8-Apr | 7 | 100 | 28.6 |
| Bailer, oaken, to well (<i>urna de lignis quercinis ad fontem</i>) | | 12-Aug | 2 | 24 | 24 |

| | | | | | |
|---|--------------------------|--------|-------|------|-------|
| Bar iron, for stone breakers (<i>ferrea stange saxifragis</i>) | | 10-Jun | 4 | 100 | 50 |
| Barrel, big (<i>magnum doleum</i>) | | 15-Jul | 1 | 15 | 30 |
| Barrow (<i>rabber</i> [=Schiebkarren]) | | 4-Mar? | 6 | 53 | 17.7 |
| Beam, of oak, at bridge (<i>asser quercinus ad pontes</i>) | | 10-Jun | 60 | 150 | 5 |
| Bed frame (<i>sponda</i>) | | 25-Nov | 1 | 8 | 16 |
| Box, big, for the instruments of the cannons (<i>magna ladula in qua instrumenta ad bombardas imponi debeant et conservari</i>) | | 22-Apr | 1 | 14 | 28 |
| Brick (<i>later</i>) | 1000 pieces | 5-Aug | 9600 | 480 | 100.0 |
| | | 12-Aug | 11900 | 595 | 100.0 |
| | | 26-Aug | 15050 | 750 | 99.7 |
| | | 2-Sep | 12500 | 625 | 100.0 |
| | | 16-Sep | 11600 | 575 | 99.1 |
| | | 7-Oct | 16000 | 800 | 100.0 |
| | | 7-Oct | 3500 | 175 | 100.0 |
| | | 11-Nov | 13000 | 650 | 100.0 |
| | | 24-Nov | 550 | 28 | 101.8 |
| | | 16-Dec | 8100 | 405 | 100.0 |
| Carbon (<i>carbo</i>) | sack (<i>saccus</i>) | 5-Aug | 7 | 10.5 | 3 |
| | basket (<i>sporta</i>) | 4-Nov | 1 | 34 | 68 |
| Clothing (<i>vestis curialis</i>) | | 16-Dec | 1 | 100 | 200 |
| Copper (<i>cuprum</i>) | pound (<i>libra</i>) | 9-Sep | 13 | 52 | 8 |
| Door (<i>dwr geredt</i>) | | 13-May | 1 | 16 | 32 |
| Door (<i>ianua</i>) | | 26-Aug | 5 | 170 | 68 |
| Firewood (<i>lignum</i>) | car (<i>plaustrum</i>) | 2-Dec | 1 | 9 | 18 |
| | | 16-Dec | 2 | 14.5 | 14.5 |
| | | 16-Dec | 1 | 9 | 18 |
| Fish (<i>piscis seminalis</i>) | 300 pieces | 8-Apr | 5600 | 216 | 11.57 |
| | | 29-Apr | 6000 | 200 | 10.00 |
| | | 10-Jun | 2800 | 100 | 10.71 |
| | | 10-Jun | 1400 | 50 | 10.71 |
| | | 22-Jul | 1560 | 52 | 10.00 |
| | | 19-Jul | 3000 | 100 | 10.00 |
| | | 23-Sep | 1500 | 50 | 10.00 |
| Fishnet (<i>rete ad piscandam</i>) | | 12-Aug | 1 | 75 | 150 |
| Fishnet, big (<i>magnum rete ad piscandam</i>) | | 18-Mar | 1 | 75 | 150 |
| Hoe (<i>ligo</i>) | | 10-Jun | 2 | 16 | 16 |
| | | 22-Jul | 2 | 18 | 18 |
| | | 25-Nov | 6 | 42 | 14 |
| Iron (<i>ferrum</i>) | pound (<i>libra</i>) | 12-Aug | 51 | 51 | 2 |
| | | 7-Oct | 49.5 | 33 | 1.3 |
| | | 11-Nov | 150 | 150 | 2 |
| | | 25-Nov | 25 | 25 | 2 |
| | | 25-Nov | 175 | 125 | 1.4 |
| | | 16-Dec | 125 | 125 | 2 |

| | | | | | |
|---|-------------------------------|---------|-------|------|-------|
| Lead (<i>plumbum</i>) | centner | 24-Nov | 0.25 | 44 | 352 |
| | | 24-Nov | 1 | 162 | 324 |
| Mallet (<i>schlegel</i> [=Schlägel]) | | 15-Apr | 1 | 2 | 4 |
| | | 24-Jun | 1 | 3 | 6 |
| Mortar (<i>morter</i>) | vessel (<i>scaffium</i>) | 29-Apr | 9 | 16 | 3.56 |
| Nail (<i>clavus</i>) | 100 pieces | 22-Apr | 100 | 10 | 20 |
| Nail, used at roofs (<i>clavus deck</i>) | 100 pieces | 11-Mar | 3500 | 53.5 | 3.06 |
| | 100 pieces | 12-Aug | 3000 | 50 | 3.33 |
| | 100 pieces | 26-Aug | 6000 | 96 | 3.20 |
| Nail, used at slats (<i>clavus lacz</i>) | 100 pieces | 11-Mar | 50 | 3 | 12.00 |
| | 100 pieces | 17-Jun | 2000 | 120 | 12.00 |
| | 100 pieces | 1-Jul | 11000 | 500 | 9.09 |
| Nail, used at posts (<i>clavus gyr</i>) | 100 pieces | 1-Jul | 40 | 13 | 65.00 |
| | 100 pieces | 9-Sep | 18 | 8 | 88.89 |
| Nail, used at bridges (<i>clavus ponticalus</i>) | 100 pieces | 17-Jun | 300 | 12 | 8.00 |
| Nail, small (<i>clavicula</i>) | 100 pieces | 16-Sep | 900 | 42 | 9.33 |
| Nail, of iron, big (<i>magnus clavus ferreus</i>) | | 25-Nov | 1 | 6 | 12 |
| Rein (<i>laqueus sleg et zom</i>) | 10 pieces | 26-Aug | 14 | 29 | 41.43 |
| Noose/string (<i>laqueus</i>) | 10 pieces | 27-May | 2 | 2 | 20.00 |
| Noose/string, of linden (<i>laqueus de tilia</i> ; <i>laqueus de tilia gebwnt</i>) | 10 pieces | 20-May | 43 | 20.5 | 9.53 |
| | 10 pieces | 10-Jun | 79 | 35.5 | 8.99 |
| | 10 pieces | 22-Jul | 21 | 10 | 9.52 |
| Rain gutter (<i>stillicidium</i>) | | 1-Jul | 3 | 12 | 8 |
| | | 25-Nov | 1 | 8 | 16 |
| Red lead (<i>minium</i>) | | 7-Oct | 2.5 | 15 | 12 |
| Rip (<i>flecht ad piscinam ... pro piscibus retinendis</i>) | | 23-Sep | 1 | 6 | 12 |
| Roof-tile (<i>tegula</i>) | 100 pieces | 12-Aug | 1000 | 62 | 12.40 |
| | | 12-Aug | 6400 | 400 | 12.50 |
| | | 11-Nov | 2500 | 188 | 15.04 |
| | | 16-Dec | 1100 | 68 | 12.36 |
| Saltpeter (<i>sal nitri</i>) | centner | Sep | 0.5 | 200 | 800 |
| Shingle (<i>scindula</i>) | 1000 pieces | 11-Mar | 1800 | 63 | 70.00 |
| | | 18-Mar | 1000 | 33 | 66.00 |
| | | 22-Jul | 7500 | 272 | 72.53 |
| Shovel (<i>schuffel/schwfflen</i> [=Schaufel]) | | 4-Mar? | 11 | 11 | 2 |
| | | 17-Jun | 3 | 3 | 2 |
| Sneck (<i>sera blat</i>) | | 8-Apr | 1 | 25 | 50 |
| Sneck (<i>sera</i>) | | 29-Apr | 1 | 8 | 16 |
| | | 17-Jun | 1 | 16 | 32 |
| | | 11-Nov | 1 | 2 | 4 |
| Sneck and key (<i>sera et clavis</i>) | | 2-Sep | 1 | 7 | 14 |
| Step (<i>gradus ad turrim</i>) | | 15-Apr | 1 | 34 | 68 |
| Stool, big (<i>scampnum magnum ad stubam</i>) | | 25-Mar? | 4 | 24 | 12 |
| Stove/furnace (<i>fornax</i>) | | 23-Sep | 1 | 16 | 32 |
| | | 23-Sep | 1 | 25 | 50 |

| | | | | | |
|---|---------|---------|-----|-----|------|
| | | 11-Nov | 1 | 36 | 72 |
| Stove/furnace, new (<i>fornax</i>) | | 25-Nov | 1 | 55 | 110 |
| Strainer (<i>capisterium</i>) | | 15-Apr | 2 | 1 | 1 |
| | | 22-Apr | 13 | 6.5 | 1 |
| | | 5-Aug | 4 | 3 | 1.5 |
| | | 9-Sep | 2 | 3 | 3 |
| Strainer, big, to a fountain (<i>capisterium</i>) | | 6-May | 1 | 288 | 576 |
| Table (<i>mensa</i>) | | 24-Jun | 1 | 6 | 12 |
| Vessel of wood (<i>schechtert ad balneam stubam</i>) | | 25-Mar? | 1 | 15 | 30 |
| Wax, black (<i>cera nigra</i>) | centner | 24-Nov | 0.5 | 150 | 600 |
| Wheel (<i>rota</i>) | | 8-Apr | 1 | 16 | 32 |
| Wheel, to cannon, big (<i>rota magna ad bombardam</i>) | | 15-Apr | 1 | 20 | 40 |
| Wheel, to cannon (<i>rota ad bombardam</i>) | | 22-Apr | 3 | 52 | 34.7 |
| Wheel, to well (<i>rota</i>) | | 7-Oct | 3 | 125 | 83.3 |
| Window frame (<i>fynsterkepp</i> [=Fensterstock] <i>ad stubam in posthey Porticis</i>) | | 29-Apr | 2 | 22 | 22 |

Table 4. Prices in Sibiu, 1524. (1 [counting] florin= 50 *akces*= 100 denars.)⁴³

| | Unit | Date of payment | Quantity | Total price, in <i>akces</i> | Unit-price (in denars) |
|--|--------------------------|-----------------|----------|------------------------------|------------------------|
| Char | 1 day | 4-Nov | 8 | 32 | 8 |
| | | 11-Nov | 6 | 24 | 8 |
| | | 11-Nov | 16 | 16 | 2 |
| | | 16-Dec | 14 | 54 | 7.7 |
| Char, counting bricks or tiles (when locating them in cars) (<i>uni qui numeravit eos ad currus</i>) | | 3-Jun | 2 | 6 | 6 |
| Char, stone breaker (<i>saxifragus; saxifragus lapides frangens</i>) | | 17-Jun | 16 | 85 | 10.6 |
| | | 4-Nov | 3 | 12 | 8 |
| Char, transporting brick (<i>lateres importaverunt</i>) | | 22-Jul | 5 | 18 | 7.2 |
| Counting bricks or tiles (when locating them in cars) (<i>uni qui numeravit eos ad currus</i>) | 1000 pieces of bricks | 13-May | 6300 | 8 | 2.54 |
| | | 17-Jun | 8700 | 6 | 1.38 |
| | 1000 pieces of tiles | 15-Jul | 5200 | 4 | 1.54 |
| | 1000 pieces of bricks | 19-Jul | 11100 | 8 | 1.44 |
| | | 26-Aug | 15050 | 12 | 1.59 |
| | | 16-Sep | 10750 | 8 | 1.49 |
| | | 23-Sep | 13500 | 8 | 1.19 |
| | 1000 pieces of bricks or | 23-Sep | 5450 | 6 | 2.20 |

⁴³ Source: *Quellen*,, 550-580.

| | | | | | |
|--|-------|--|--|--|--|
| | tiles | | | | |
|--|-------|--|--|--|--|

Table 5. Day- and workwages in Sibiu, 1524⁴⁴

⁴⁴ Source: *Quellen*, 550-580.